

CHRYSO®Fibre Syntec 12

Synthetic micro-fiber
Monofilament Fibers



DESCRIPTION

CHRYSO®Fibre Syntec 12 is a new generation synthetic polypropylene microfiber for reinforcement of concrete. CHRYSO's unique technology combines ultra thin diameter with ultra high strength fibers, resulting in the highest level of plastic shrinkage crack prevention available.

Hundreds of millions of high tensile, high modulus filaments per dose of **CHRYSO®Fibre Syntec 12** create an extremely dense, three dimensional network in any cementitious application.

BENEFITS

- **CHRYSO®Fibre Syntec 12** has a good adherence to the cement paste, which increases strain capacity.
- It slows down bleeding, reduces permeability and avoids spalling.
- It decreases the risk of cracking during the pre hardening stage. This means the damaging effects of plastic shrinkage are eliminated.
- It improves abrasive resistance, resistance to impacts (joints, angles), resistance to frost/defrost cycle, fire resistance and resistance to chemical attack.
- **CHRYSO®Fibre Syntec 12** is not a replacement to structural reinforcement, but it is a very good alternative to mesh reinforcement that is used to control plastic shrinkage and plastic settlement cracking. This reduces cost and construction time while making the construction process easier.

PACKAGING

- 600 g water-dispersible sachet

FIELDS OF APPLICATION

CHRYSO®Fibre Syntec 12 is recommended for all concrete and mortar mixes where reduction of cracking caused by plastic shrinkage, plastic settlement, thermal expansion and contraction in concrete is desirable. It also contribute to reduce water migration and to increase the surface resistance to impacts, abrasion and shattering.

- All cement types
- Precast
- Slabs
- Shotcrete
- High performance Concrete - Very High Performance Concrete - Ultra High Performance Concrete
- High durability concrete
- Cement screed
- Pumped concrete
- Self levelling concrete
- Man holes
- etc

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INDICATIVE INFORMATION

Product Nature	Polypropylene fibers
Color	White
Lifetime	24 months
Specific gravity	0,910 ± 0,020
Fiber length	12 mm
Nominal diameter	35 µm
Tensile strength	500 MPa
Elasticity module	4 GPa
Fusion Point	160 °C
Chemical resistance	Strong

METHOD OF USE

- This product may cause loss of workability which can be compensated by using an appropriate plasticizing or superplasticizing admixture.
- This product is compatible with any CHRYSO® admixture.
- The optimum dosage of this product can only be established after trial tests, taking into account the rheological characteristics and the required mechanical performances of the concrete.
- The dosage of **CHRYSO®Fibre Syntec 12** is 600 to 900 gm per m³ of concrete.
- **CHRYSO®Fibre Syntec 12** is packed in pre measured, ready for concrete degradable bags, designed to be introduced into the mix at any time before, during or after the other ready mixed concrete materials. Please follow proper mixing procedures.
- **CHRYSO®Fibre Syntec 12** can be added directly into the truck mixer, followed by rapid mixing for 5 minutes.

PRECAUTIONS

- Store in a well ventilated location.

Compatibility:

- **CHRYSO®Fibre Syntec 12** is compatible with all types of Portland cement, class C and F fly ash, slag, micro silica, steel fibers and approved air entraining admixtures.
- **CHRYSO®Fibre Syntec 12** is not a structural reinforcement of concrete.

NORMATIVE AND REGULATORY INFORMATION

- This product conforms to CE-EN 14889-2 standards. The appropriate declaration can be found on our internet site.

SAFETY

CHRYSO®Fibre Syntec 12 is not considered dangerous to handle. Prior to any use, please read carefully the Material Safety Data Sheets.